

AMENDMENT UNDER 37 C.F.R. § 1.111
U.S. Appln. No.: 09/396,238
Attorney Docket No.: Q78413

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of lithographic printing comprising forming an image based on signals of image data directly on a printing plate precursor mounted on a plate cylinder of a printing press, thereby preparing a printing plate, and conducting lithographic printing,

wherein the step of forming the image on the printing plate precursor is carried out by an ink jet recording method in which oil-based ink is ejected utilizing an electrostatic field and further comprising controlling an ink concentration by feeding a concentrated ink and a diluent and fixing the oil-based ink image on the printing plate precursor by a heat roll heating, and

wherein the printing plate has an image receiving layer thereon which is hydrophilic and the oil-based ink comprises electroscopic particles.

2 (previously presented): The method of lithographic printing as claimed in claim 1, wherein said oil-based ink is a dispersion comprising hydrophobic resin particles which are solid at least at a temperature of 15 to 35°C dispersed in a nonaqueous solvent having an electric resistance of at least $10^9 \Omega\text{cm}$ and a dielectric constant of 3.5 or less.

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3. (canceled).

4. (previously presented): The method of lithographic printing as claimed in claim 1, further comprising using means for removing dust which is present on the surface of the printing plate precursor before and/or during the step of forming the image on the printing plate precursor.

5. (previously presented): The method of lithographic printing as claimed in claim 1, wherein rotation of said plate cylinder on which the printing plate precursor is mounted affects main scanning during the step of forming the image on the printing plate precursor.

6. (previously presented): The method of lithographic printing as claimed in claim 5, wherein the step of forming the image on the printing plate precursor by the ink jet recording method is carried out using an ink jet recording device equipped with a single or multiple head, and the head is slid in the axis direction of the plate cylinder to accomplish the sub-scanning during the step of forming the image on the printing plate precursor.

7. (previously presented): The method of lithographic printing as claimed in claim 6, wherein said ink jet recording device is equipped with a full line head having a length almost the same as the length of the plate cylinder.

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8. (original): The method of lithographic printing as claimed in claim 6, wherein said ink jet recording device is further equipped with means for supplying the oil-based ink to the head.

9. (previously presented): The method of lithographic printing as claimed in claim 6, wherein the ink jet recording device is further equipped with a combination of means for supplying the oil-based ink to the head and means for recovering the oil-based ink from the head to perform an ink circulation.

10. (original): The method of lithographic printing as claimed in claim 7, wherein said ink jet recording device is further equipped with means for supplying the oil-based ink to the head.

11. (previously presented): The method of lithographic printing as claimed in claim 7, wherein the ink jet recording device is further equipped with a combination of means for supplying the oil-based ink to the head and means for recovering the oil-based ink from the head to perform an ink circulation.

12. (original): The method of lithographic printing as claimed in claim 1, wherein said oil-based ink is stored in an ink tank having means for stirring inside the ink tank.

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13. (previously presented): The method of lithographic printing as claimed in claim 12, wherein said ink tank further has means for controlling ink temperature inside the ink tank.

14. (previously presented): The method of lithographic printing as claimed in claim 12, wherein said ink tank further has means for controlling ink concentration inside the ink tank.

15. (previously presented): The method of lithographic printing as claimed in claim 1, wherein the ink jet recording method is carried out using an ink jet recording device equipped with a single or multiple head and the head is installed so that it is kept close to the plate cylinder during the step of forming the image on the printing plate precursor and at other times, it is kept away from the plate cylinder by means for moving the head near or away.

16. (previously presented): The method of lithographic printing as claimed in claim 1, further comprising using means for removing paper dust generated during the lithographic printing.

17. (previously presented): The method of lithographic printing as claimed in claim 1, wherein the ink jet recording method is carried out using an ink jet recording device equipped with a single or multiple head and the method further comprises using means for cleaning the head in the ink jet recording method at least at the completion of plate making.

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18. (previously presented): The method of lithographic printing as claimed in claim 1, wherein the plate cylinder is coated with a heat insulator.